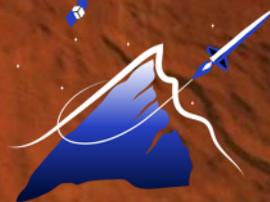
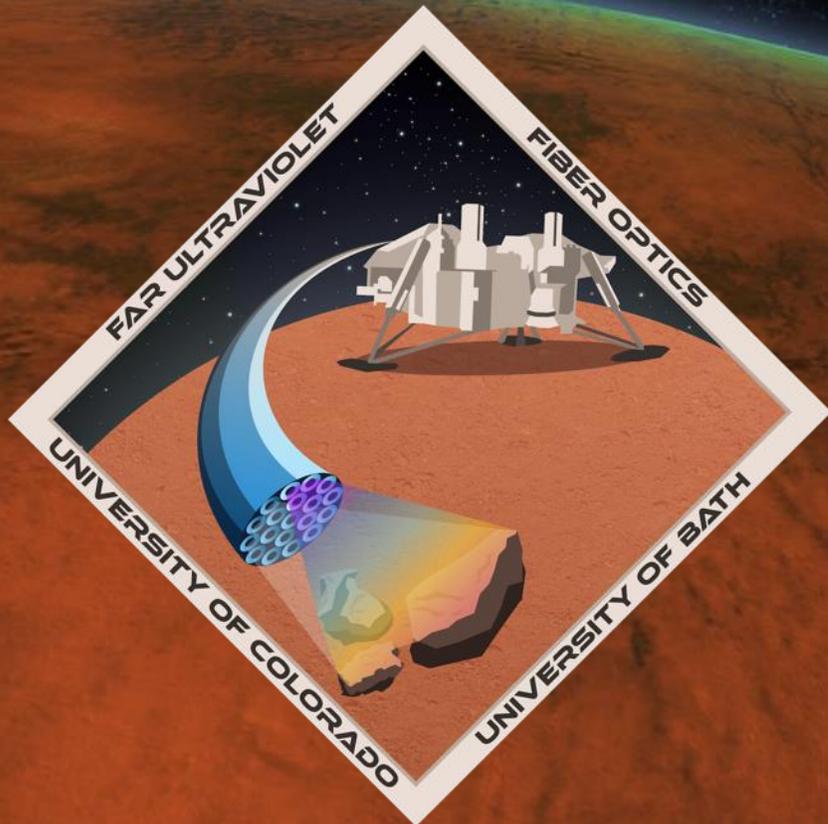


101 Fun Things to do with Far-UV Fiber Optics

Brian Fleming - University of Colorado - Brian.fleming@colorado.edu

AAS 237: NASA COPAG UV SIG/TIG Splinter

January 14, 2021



CUSP
THE COLORADO ULTRAVIOLET SPECTROSCOPY PROGRAM



Integral Field Spectroscopy in the Far-UV

Galaxies, halos, nebulae, supernova shocks, are **extended objects**

Every orbital FUV/LUV ($\lambda < 120$ nm) spectrograph in the history of orbital FUV spectrographs have been **point source spectrographs** or had **> 1' resolution**

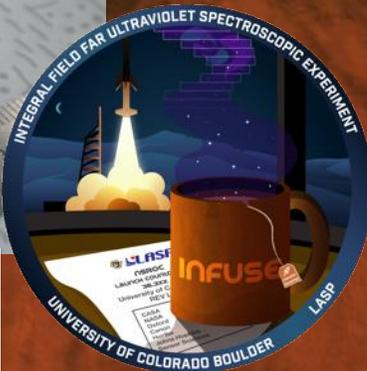
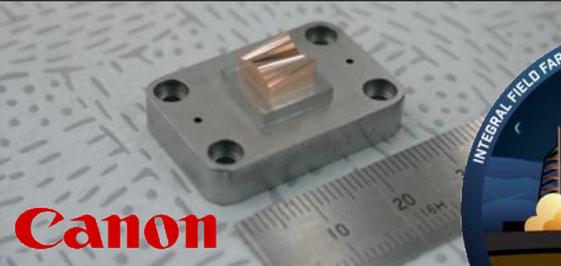
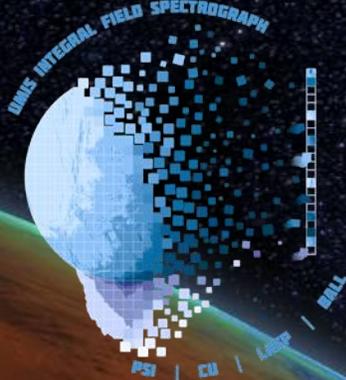
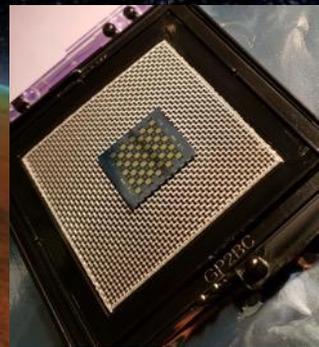
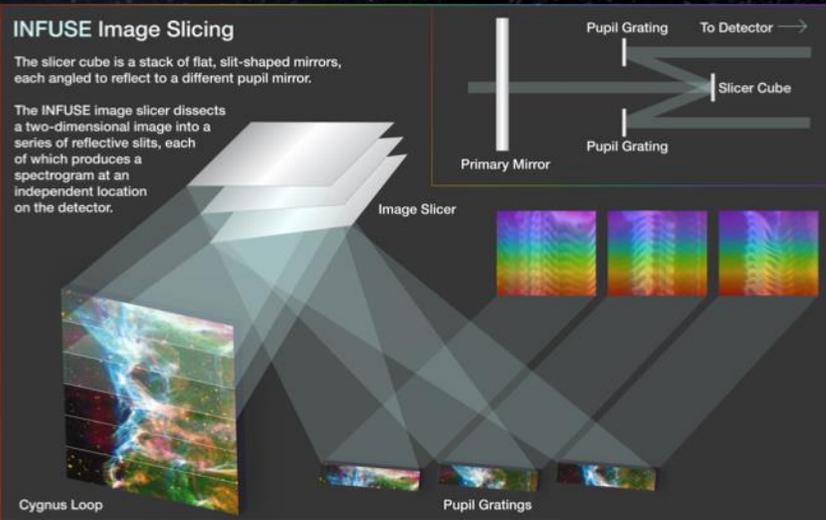
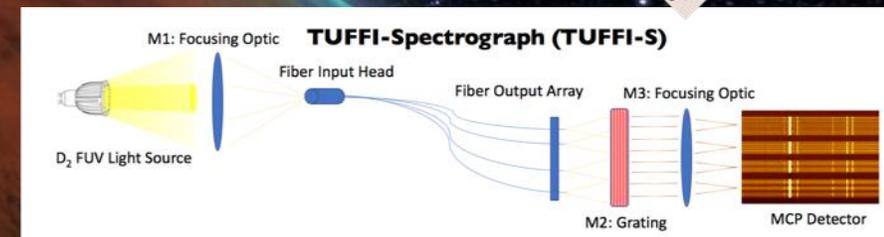


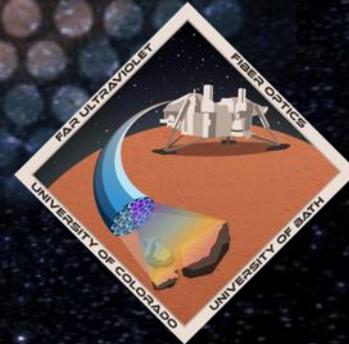
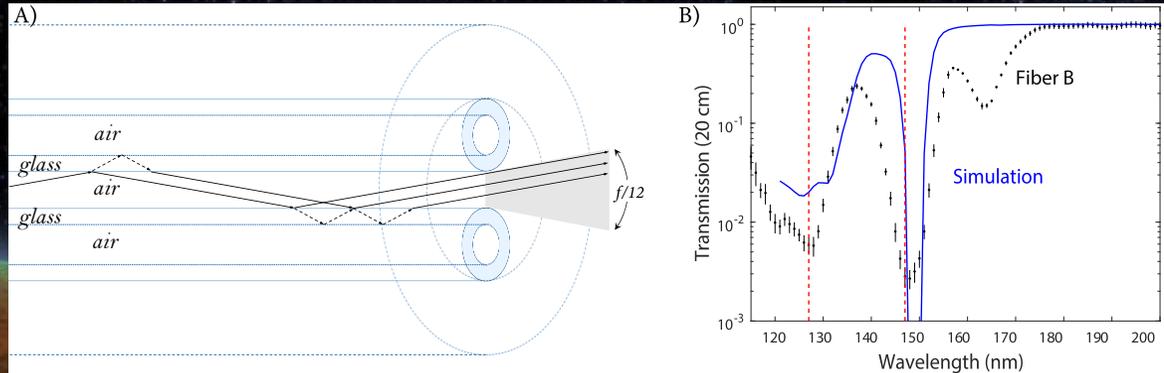
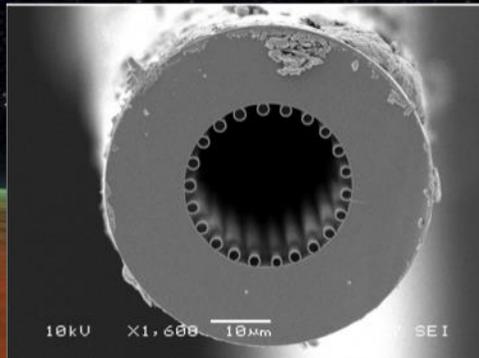
Image slicing (INFUSE)
and
Adaptive image slicing
(UMIS; PI A. Hendrix, PSI)
UV IFUs for the 2020s



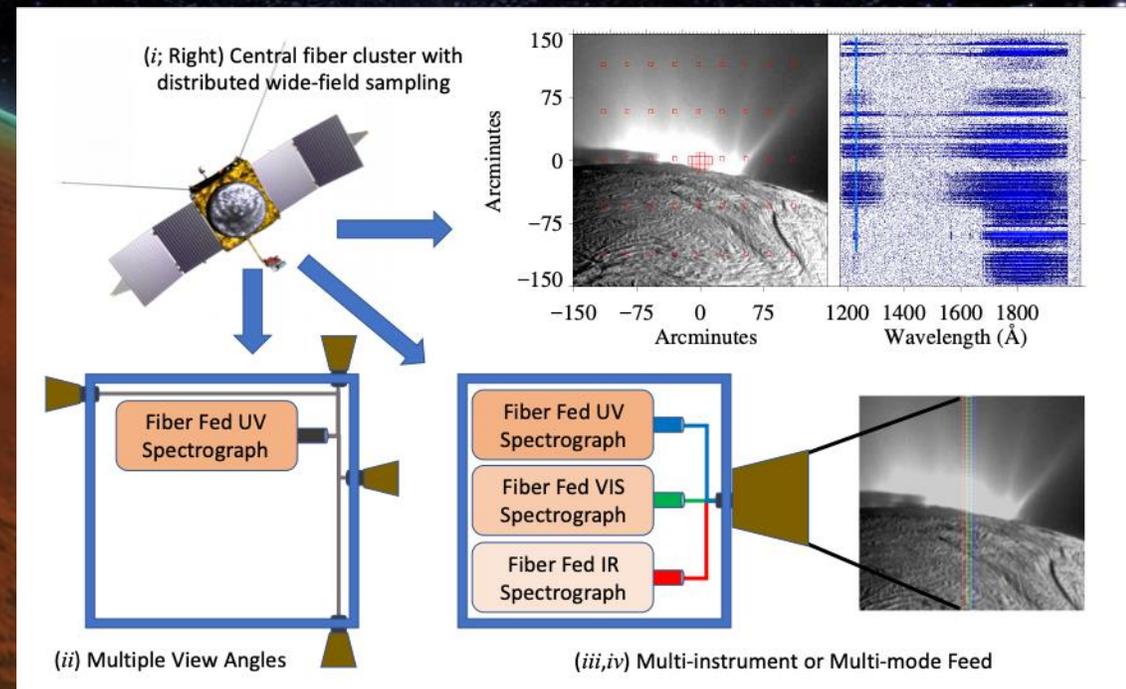
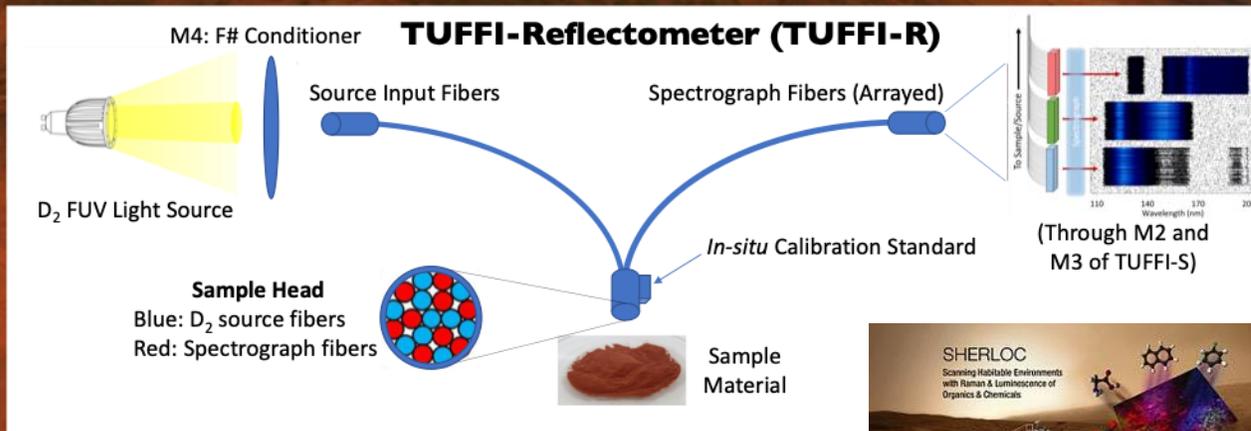
Far-UV Guiding Fiber Optics



For... calibration... And Planetary Science!



Other UV Fiber Optics Team Members: Dmitry Vorobiev, Wes Gilliam (Student), Zayna Sheikh (Logo), U Bath (UK)



UV fiber optics with transmission to ~ 215 nm are already incorporated in a Raman spectrograph concept (ICARUS; Retherford et al., 2019)